

# AFRL Information Directorate (Rome Research Site) Information Directorate

## AFCEA New Horizons Symposium

13-14 November 1997

Presented By:

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Principal Physical Scientist

AFRL/IFP

(315) 330-3705



#### **Outline**

**Information Directora** 

- **◆ Information Directorate Vision**
- Mission
- Organization
- **♦** Overview: Existing Contracts
- **♦ Overview: Planned New Projects**



## RECENT C2 EVOLUTION

**Information Directora** 

SAB Review

DARPA Leveraged Programs



QDR

Vision
Technology
Core Competency

A&S C2 Agency

AFMC/ST Single Lab

ESC Reorganization

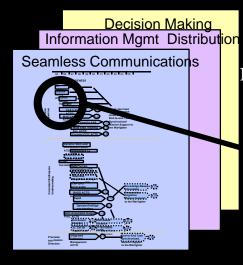
Global Engagement

RL C2 "Vision"



## **Shared C2 Attributes**

**Information Directora** 



Defense Technology Area Plan

ESC and DII-AF

Dynamic Planning/Execution

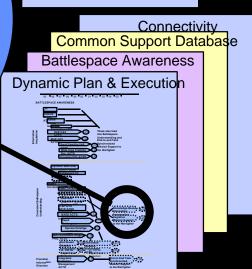
Global
Information Global
Exchange Awareness

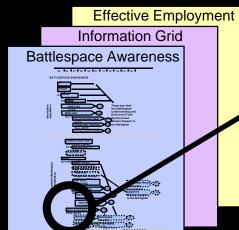
SAB 96 - C4ISR Panel Vision of AF C2

ABIS and AF/SC

Collaborative Surveillance
Collaborative Planning
Common Battlespace
Picture

Pictur







#### C2 Vision Hierarchy

**Information Directora** 

#### Joint Vision 2010



Global Awareness

Global Info Exchange Dynamic Planning COMMUNICATIONS & Exec.

INTELLIGENCE

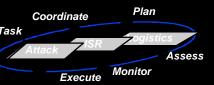
**FUSION** 







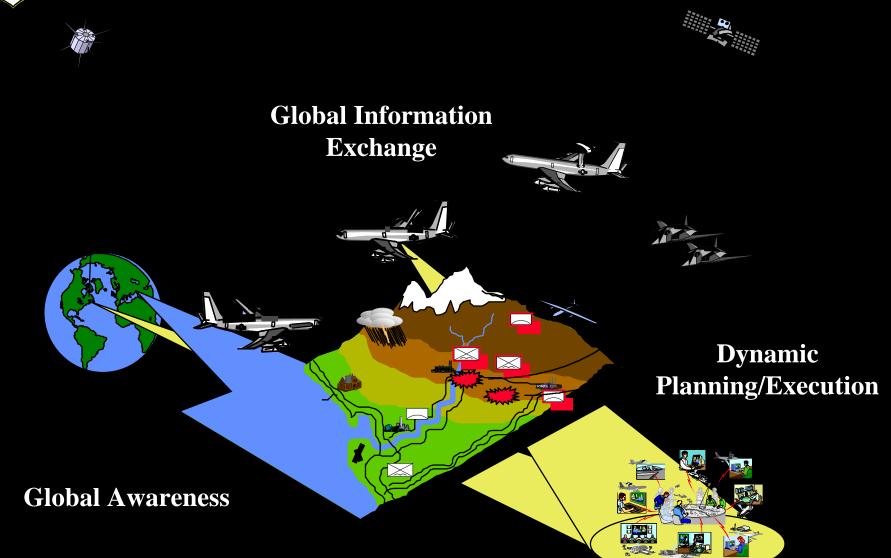




**Continuous Planning** 



## Information Directorate Program Description Information Directora





#### Mission Statement

**Information Directora** 

## WE ADVANCE & TRANSITION THE SCIENCE & TECHNOLOGIES OF C4I TO MEET OUR CUSTOMER'S NEEDS

- ♦ WE CONDUCT VIGOROUS RESEARCH, DEVELOPMENT, & TEST PROGRAMS IN ALL ENABLING TECHNOLOGIES
- ♦ WE TRANSITION TECHNOLOGY TO CURRENT & FUTURE SYSTEMS TO IMPROVE OPERATIONAL CAPABILITY, READINESS, & SUPPORTABILITY
- ♦ WE PROVIDE A FULL RANGE OF TECHNICAL SUPPORT TO AFMC SYSTEM CENTERS & OTHER AF & D₀D ORGANIZATIONS
- ♦ WE CONDUCT SELECTED ACQUISITION PROGRAMS FOR LOW-VOLUME, LIMITED-QUANTITY INTELLIGENCE & SOFTWARE SYSTEMS
- ♦ WE PROMOTE THE TRANSFER OF TECHNOLOGY TO THE PRIVATE SECTOR



## Information Directorate Organization

#### **Information Directora**

**DIRECTOR DEPUTY DIRECTOR** 

**CHIEF SCIENTIST** 

PLANS & MGMT IFP

PK

CIO

CDO IFN

INFORMATION **TECHNOLOGY DIVISION** (IFT)

INFORMATION

**INFORMATION & INTELLIGENCE EXPLOITATION DIVISION** 

**INFORMATION SYSTEMS** DIVISION (IFS)

SITE **OPERATIONS** (IFO)

EMBEDDED INFORMATION **SYSTEMS ENGINEERING** (IFTA)

INTELLIGENT INFORMATION SYSTEMS R (IFTB)

**ADVANCED** COMPUTING **ARCHITECTURE** (IFTC)

DYNAMIC SYSTEMS DESIGN CONCEPTS (IFTD)

MULTI -TECHNOLOGY INTEGRATION R (IFTE)

**GRID DIVISION** (IFG)

DISTRIBUTED INFORMATION **SYSTEMS** (IFGA)

DEFENSIVE INFORMATION WARFARE (IFGB)

INFORMATION CONNECTIVITY (IFGC)

**PLATFORM** CONNECTIVITY (IFGD)

(IFE)

**FUSION TECHNOLOGY** (IFEA)

INFORMATION **HANDLING** (IFEB)

> **MULTI-SENSOR EXPLOITATION** (IFEC)

GLOBAL INFORMATION **BASE** (IFED)

SYSTEM CONCEPTS AND **APPLICATIONS** 

C4ISR MODELING AND SIMULATION (IFSB)

(IFSA)

ADVANCED **ARCHITECTURE** AND INTEGRATION (IFSC)

**COLLABORATIVE** SIMULATION **TECHNOLOGY AND** W APPLICATIONS(IFSD)

SYSTEM DEMONSTRATION AND INTEGRATION (IFSE)

CIVIL ENGINEERING

LOGISTICS

**COMPUTERS & COMM** 

WORKFORCE RELATIONS

INFORMATION **SERVICES** 

JUDGE ADVOCATE

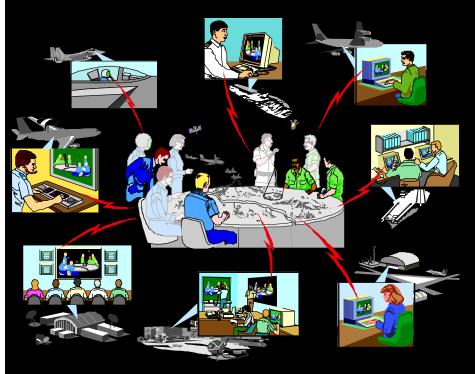
SECURITY FORCES

**STAFF METEOROLOGIST** 



#### **Information Technology Division**

**Information Directora** 



#### **Core Technologies**

**Knowledge Bases** 

**Planning** 

**Database Management** 

**Adaptive Computing Systems** 

**High Performance Computing** 

**Architecture (Embedded & Dependable)** 

**Emerging HW/SW (MEMS)** 

**Tools for Re-engineering** 

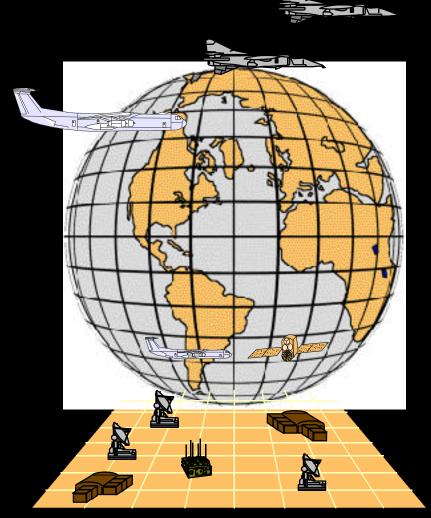
HW/SW Co-design

**Diagnostics and Prognostics** 



#### **Information Grid Division**

**Information Directora** 

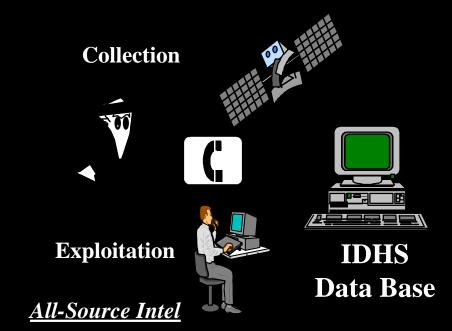


#### **Core Technologies**

Network Protocol
Network Management & Control
Distributed Information Infrastructure
Distributed Environments
Multilevel Security
Intrusion/Malicious Code Detection
Information Attack Mitigation
COMSEC
Multi-band/Multi-mode Radios
LPI/AJ Waveforms
Unmanned Air Vehicles
Satellite Communications
Airborne Communications



## **Information & Intelligence** Exploitation Division Information Directora



#### **Core Technologies**

**Information Fusion Cueing and Correlation Special Projects Signal Exploitation Exploitation Technology Information Data Handling** 



## **Information Systems Division**

**Information Directora** 

#### **Core Technologies**



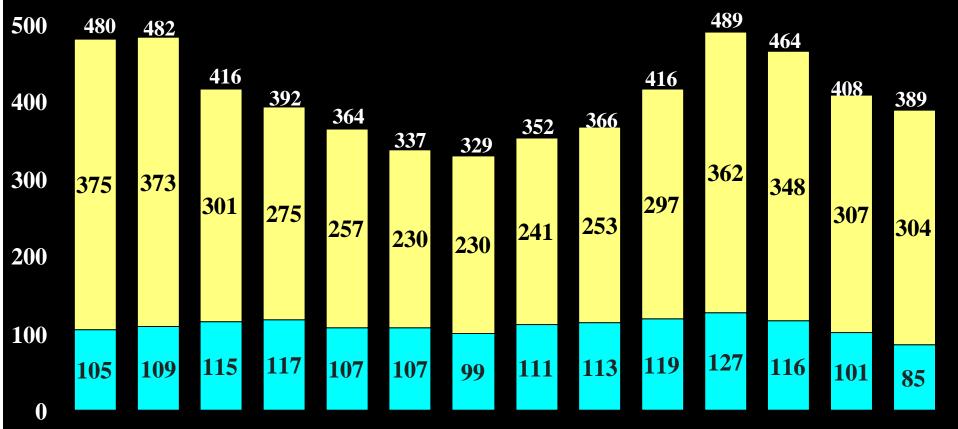
**Distributed Information Systems System Concepts Analysis Modeling Methodology** Virtual Prototyping High Level Architecture (Modeling & Simulation) **Real-Time People/Equipment "in** the loop" Demonstrations **Sensor to Shooter Experiments Full Spectrum Demonstrations Electromagnetic Testing Computer Aided Engineering Demonstrations** 

**Distributed Testbeds** 



## Funding Trend All Sources - Then-Year Dollars (\$M)

#### ■ AFMC S&T LINE FUNDING ■ OTHER



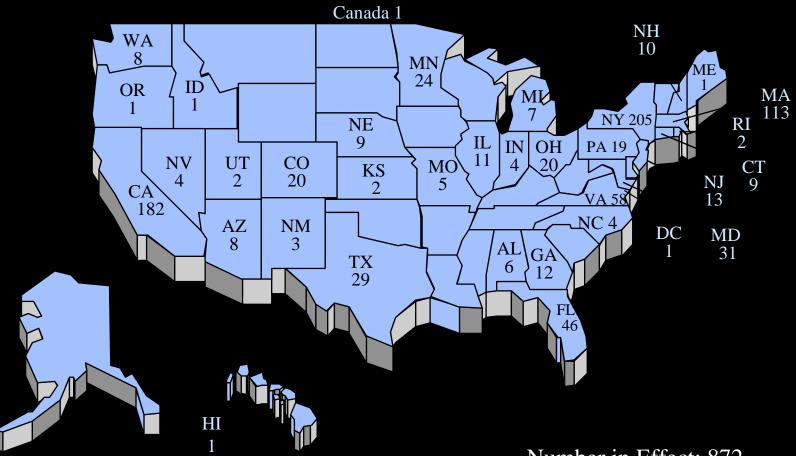
FY86 FY87 FY88 FY89 FY90 FY91 FY92 FY93 FY94 FY95 FY96 FY97 FY98 FY99 FY86-97 Rome Laboratory

FY98-99 Information Directorate



## **Existing Contracts**

**Information Directora** 



Number in Effect: 872 Value: \$1,408,403,230

as of July 97



### **Task Ordering Contracts (TOCs)**

**Information Directora** 

Contract: F30602-94-D-0007

Sterling Software, Inc.

1404 Fort Crook Road, South Bellevue, NE 68005-2969

Contractor POC:

James Trent 703-356-3551

Government POC:

Rick Loreto/IRDD/315-330-3793

Contract: F30602-94-D-0055

Harris Corporation PO Box 98000

Melbourne, FL 32902-9800

Contractor POC:

John MacMillan - 407-984-6398

Government POC:

Tandy Paugh/IRAE/315-330-2910

Contract: F30602-95-D-0028

Synectics Corporation 10400 Eaton Place Fairfax, VA 22030

Contractor POC: Kathy White 703-293-3949 or

James Muller 315-337-3510 (Rome)

Government POC: Bill Horth/ERDD/315-330-2241

Contract: F30602-96-D-0058 BBN Systems and Technologies

10 Moulton Street Cambridge, MA 02138

Contractor POC: Jefferey Tillie

Government POC:

Paul Sierak/C3CB/315-330-3041

Contract: F30602-95-D-0059

Decision-Science Applications, Inc

1110 N. Glebe Road, Suite 400

Arlington, VA 22201

Contractor POC:

Kathleen Ackerson 703-243-2500

Government POC:

Virginia Ross/OCTP/315-330-4381



#### **BAAs and PRDAs**

**Information Directora** 

#### Broad Agency Announcements (BAAs)

- ➤http://www.rl.af.mil
  - Information on 30 BAAs
  - Listing and Searchable Database

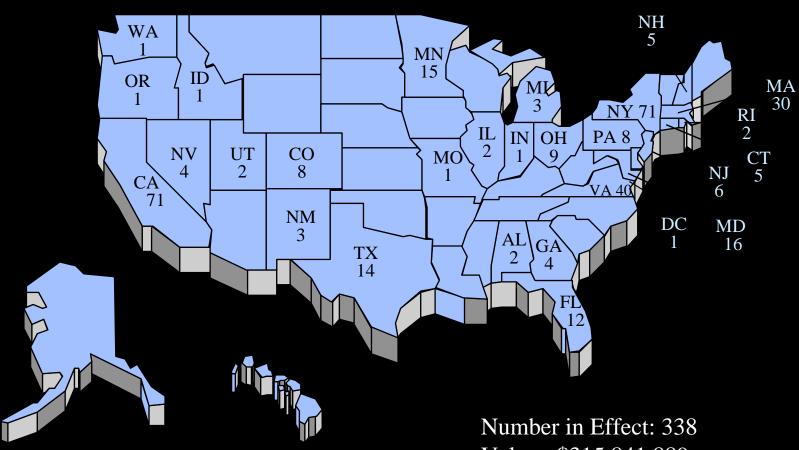
#### Program Research & Development Announcements (PRDAs)

- ➤http://www.rl.af.mil
  - Information on 8 PRDAs
  - Listing and Searchable Database



#### **Small Business Contracts**

**Information Directora** 



Value: \$315,841,889

as of July 97



## Small Business Innovation Research (SBIR) Program

**Information Directora** 

#### **♦**Objectives

- **►**To Stimulate Technological Innovation
- ➤To promote Commercial Innovations Derived from Federal R&D
- ➤To encourage participation by Minority Owned/Disadvantaged Small Business
- ◆ RL SBIR Funding has increased from \$13.1M FY94
- ♦ to \$20M FY97

#### **♦** RL SBIR Performance

- ➤ Standardized formats and model contracts used for SBIR
- ➤ Beat DoD Mandated Deadlines for Procurement by 4-6 months
- ➤ Produced SBIR Commercial Successes Available for sale to military and commercial entities



#### **Planned New Projects**

**Information Directora** 

#### 79 New Projects/Contracts Planned for FY98

- ➤ Values Range from \$100K to \$25M
- ➤http://www.rl.af.mil
  - Descriptions
  - RFP and Award Dates
  - Estimated Value Range
  - Points of Contact
  - Contract Type
  - Etc.



## http://www.rl.af.mil

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